RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/578,943
Source: IFW
Date Processed by STIC: 5/22/06

ENTERED

IFWP

RAW SEQUENCE LISTING DATE: 05/22/2006
PATENT APPLICATION: **US/10/578,943** TIME: 14:17:29

Input Set : **A:\41976.txt**
Output Set: **N:\CRF4\05222006\J578943.raw**

3 <110> APPLICANT: The Regents of the University of Colorado, a Body Corporate
4 Kim, Soo Hyun
5 Dinarello, Charles A.
6 Azam, Tania
8 <120> TITLE OF INVENTION: Compositions and Methods for Regulation of Tumor Necrosis
9 Factor Alpha
11 <130> FILE REFERENCE: UTC 08870
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/578,943
C--> 14 <141> CURRENT FILING DATE: 2006-05-08
16 <160> NUMBER OF SEQ ID NOS: 27
18 <170> SOFTWARE: PatentIn version 3.2
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 20
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Synthetic
28 <400> SEQUENCE: 1
29 ctgtcccgag tctggacttt 20
32 <210> SEQ ID NO: 2
33 <211> LENGTH: 21
34 <212> TYPE: DNA
35 <213> ORGANISM: Artificial Sequence
37 <220> FEATURE:
38 <223> OTHER INFORMATION: Synthetic
40 <400> SEQUENCE: 2
41 gcaaaggtgg tggtcagtat c 21
44 <210> SEQ ID NO: 3
45 <211> LENGTH: 396
46 <212> TYPE: DNA
47 <213> ORGANISM: Homo sapiens
49 <400> SEQUENCE: 3
50 atgtgcttcc cgaaggtcct ctctgatgac atgaagaagc tgaaggcccg aatgcaccag 60
52 gctatagaaa gattttatga taaaatgcaa aatgcagaat caggacgtgg acaggtgatg 120
54 tcgagcctgg cagagctgga ggacgacttc aaagagggct acctggagac agtggcggct 180
56 tattatgagg agcagcaccc agagctcact cctctacttg aaaaagaaag agatggatta 240
58 cggtgccgag gcaacagatc ccctgtcccg gatgttgagg atcccgcaac cgaggagcct 300
60 ggggagagct tttgtgacaa gtcctacgga gccccacggg gggacaagga ggagctgaca 360
62 ccccagaagt gctctgaacc ccaatcctca aaatga 396
65 <210> SEQ ID NO: 4
66 <211> LENGTH: 567
67 <212> TYPE: DNA

68 <213> ORGANISM: Homo sapiens

RAW SEQUENCE LISTING DATE: 05/22/2006
PATENT APPLICATION: **US/10/578,943** TIME: 14:17:29

Input Set : **A:\41976.txt**
Output Set: **N:\CRF4\05222006\J578943.raw**

70 <400> SEQUENCE: 4
71 atgtgcttcc cgaaggtcct ctctgatgac atgaagaagc tgaaggcccg aatgcaccag 60
73 gccatagaaa gattttatga taaaatgcaa aatgcagaat caggacgtgg acaggtgatg 120
75 tcgagcctgg cagagctgga ggacgacttc aaagagggct acctggagac agtggcggct 180
77 tattatgagg agcagcaccc agagctcact cctctacttg aaaaagaaag agatggatta 240
79 cggtgccgag gcaacagatc ccctgtcccg gatgttgagg atcccgcaac cgaggagcct 300
81 ggggagagct tttgtgacaa ggtcatgaga tggttccagg ccatgctgca gcggctgcag 360
83 acctggtggc acggggttct ggcctgggtg aaggagaagg tggtggccct ggtccatgca 420
85 gtgcaggccc tctggaaaca gttccagagt ttctgctgct ctctgtcaga gctcttcatg 480
87 tcctctttcc agtcctacgg agccccacgg ggggacaagg aggagctgac accccagaag 540
89 tgctctgaac cccaatcctc aaaatga 567
92 <210> SEQ ID NO: 5
93 <211> LENGTH: 705
94 <212> TYPE: DNA
95 <213> ORGANISM: Homo sapiens
97 <400> SEQUENCE: 5
98 atgtgcttcc cgaaggtcct ctctgatgac atgaagaagc tgaaggcccg aatggtaatg 60
100 ctcctcccta cttctgctca ggggttgggg gcctgggtct cagcgtgtga cactgaggac 120
102 actgtgggac acctgggacc ctggagggac aaggatccgg ccctttggtg ccaactctgc 180
104 ctctcttcac agcaccaggc catagaaaga ttttatgata aaatgcaaaa tgcagaatca 240
106 ggacgtggac aggtgatgtc gagcctggca gagctggagg acgacttcaa agagggctac 300
108 ctggagacag tggcggctta ttatgaggag cagcacccag agctcactcc tctacttgaa 360
110 aaagaaagag atggattacg gtgccgaggc aacagatccc ctgtcccgga tgttgaggat 420
112 cccgcaaccg aggagcctgg ggagagcttt tgtgacaagg tcatgagatg gttccaggcc 480
114 atgctgcagc ggctgcagac ctggtggcac ggggttctgg cctgggtgaa ggagaaggtg 540
116 gtggccctgg tccatgcagt gcaggccctc tggaaacagt tccagagttt ctgctgctct 600
118 ctgtcagagc tcttcatgtc ctctttccag tcctacggag ccccacgggg ggacaaggag 660
120 gagctgacac cccagaagtg ctctgaaccc caatcctcaa aatga 705
123 <210> SEQ ID NO: 6
124 <211> LENGTH: 537
125 <212> TYPE: DNA
126 <213> ORGANISM: Homo sapiens
128 <400> SEQUENCE: 6
129 atgaagaagc tgaaggcccg aatgcaccag gccatagaaa gattttatga taaaatgcaa 60
131 aatgcagaat caggacgtgg acaggtgatg tcgagcctgg cagagctgga ggacgacttc 120
133 aaagagggct acctggagac agtggcggct tattatgagg agcagcaccc agagctcact 180
135 cctctacttg aaaaagaaag agatggatta cggtgccgag gcaacagatc ccctgtcccg 240
137 gatgttgagg atcccgcaac cgaggagcct ggggagagct tttgtgacaa ggtcatgaga 300
139 tggttccagg ccatgctgca gcggctgcag acctggtggc acggggttct ggcctgggtg 360
141 aaggagaagg tggtggccct ggtccatgca gtgcaggccc tctggaaaca gttccagagt 420
143 ttctgctgct ctctgtcaga gctcttcatg tcctctttcc agtcctacgg agccccacgg 480
145 ggggacaagg aggagctgac accccagaag tgctctgaac cccaatcctc aaaatga 537
148 <210> SEQ ID NO: 7
149 <211> LENGTH: 131
150 <212> TYPE: PRT
151 <213> ORGANISM: Homo sapiens
153 <400> SEQUENCE: 7
155 Met Cys Phe Pro Lys Val Leu Ser Asp Asp Met Lys Lys Leu Lys Ala
156 1 5 10 15

RAW SEQUENCE LISTING DATE: 05/22/2006
PATENT APPLICATION: **US/10/578,943** TIME: 14:17:29

Input Set : **A:\41976.txt**
Output Set: **N:\CRF4\05222006\J578943.raw**

```
159 Arg Met His Gln Ala Ile Glu Arg Phe Tyr Asp Lys Met Gln Asn Ala
160             20                  25                  30
163 Glu Ser Gly Arg Gly Gln Val Met Ser Ser Leu Ala Glu Leu Glu Asp
164         35                  40                  45
167 Asp Phe Lys Glu Gly Tyr Leu Glu Thr Val Ala Ala Tyr Tyr Glu Glu
168     50                  55                  60
171 Gln His Pro Glu Leu Thr Pro Leu Leu Glu Lys Glu Arg Asp Gly Leu
172 65                  70                  75                  80
175 Arg Cys Arg Gly Asn Arg Ser Pro Val Pro Asp Val Glu Asp Pro Ala
176                 85                  90                  95
179 Thr Glu Glu Pro Gly Glu Ser Phe Cys Asp Lys Ser Tyr Gly Ala Pro
180             100                 105                 110
183 Arg Gly Asp Lys Glu Glu Leu Thr Pro Gln Lys Cys Ser Glu Pro Gln
184         115                 120                 125
187 Ser Ser Lys
188     130
191 <210> SEQ ID NO: 8
192 <211> LENGTH: 188
193 <212> TYPE: PRT
194 <213> ORGANISM: Homo sapiens
196 <400> SEQUENCE: 8
198 Met Cys Phe Pro Lys Val Leu Ser Asp Asp Met Lys Lys Leu Lys Ala
199 1               5                   10                  15
202 Arg Met His Gln Ala Ile Glu Arg Phe Tyr Asp Lys Met Gln Asn Ala
203             20                  25                  30
206 Glu Ser Gly Arg Gly Gln Val Met Ser Ser Leu Ala Glu Leu Glu Asp
207         35                  40                  45
210 Asp Phe Lys Glu Gly Tyr Leu Glu Thr Val Ala Ala Tyr Tyr Glu Glu
211     50                  55                  60
214 Gln His Pro Glu Leu Thr Pro Leu Leu Glu Lys Glu Arg Asp Gly Leu
215 65                  70                  75                  80
218 Arg Cys Arg Gly Asn Arg Ser Pro Val Pro Asp Val Glu Asp Pro Ala
219                 85                  90                  95
222 Thr Glu Glu Pro Gly Glu Ser Phe Cys Asp Lys Val Met Arg Trp Phe
223             100                 105                 110
226 Gln Ala Met Leu Gln Arg Leu Gln Thr Trp Trp His Gly Val Leu Ala
227         115                 120                 125
230 Trp Val Lys Glu Lys Val Val Ala Leu Val His Ala Val Gln Ala Leu
231     130                 135                 140
234 Trp Lys Gln Phe Gln Ser Phe Cys Cys Ser Leu Ser Glu Leu Phe Met
235 145                 150                 155                 160
238 Ser Ser Phe Gln Ser Tyr Gly Ala Pro Arg Gly Asp Lys Glu Glu Leu
239                 165                 170                 175
242 Thr Pro Gln Lys Cys Ser Glu Pro Gln Ser Ser Lys
243             180                 185
246 <210> SEQ ID NO: 9
247 <211> LENGTH: 234
248 <212> TYPE: PRT
249 <213> ORGANISM: Homo sapiens
```

RAW SEQUENCE LISTING DATE: 05/22/2006
PATENT APPLICATION: **US/10/578,943** TIME: 14:17:29

Input Set : **A:\41976.txt**
Output Set: **N:\CRF4\05222006\J578943.raw**

```
251 <400> SEQUENCE: 9
253 Met Cys Phe Pro Lys Val Leu Ser Asp Asp Met Lys Lys Leu Lys Ala
254 1               5                  10                  15
257 Arg Met Val Met Leu Leu Pro Thr Ser Ala Gln Gly Leu Gly Ala Trp
258             20                  25                  30
261 Val Ser Ala Cys Asp Thr Glu Asp Thr Val Gly His Leu Gly Pro Trp
262         35                  40                  45
265 Arg Asp Lys Asp Pro Ala Leu Trp Cys Gln Leu Cys Leu Ser Ser Gln
266     50                  55                  60
269 His Gln Ala Ile Glu Arg Phe Tyr Asp Lys Met Gln Asn Ala Glu Ser
270 65                  70                  75                  80
273 Gly Arg Gly Gln Val Met Ser Ser Leu Ala Glu Leu Glu Asp Asp Phe
274                 85                  90                  95
277 Lys Glu Gly Tyr Leu Glu Thr Val Ala Ala Tyr Tyr Glu Glu Gln His
278             100                 105                 110
281 Pro Glu Leu Thr Pro Leu Leu Glu Lys Glu Arg Asp Gly Leu Arg Cys
282         115                 120                 125
285 Arg Gly Asn Arg Ser Pro Val Pro Asp Val Glu Asp Pro Ala Thr Glu
286     130                 135                 140
289 Glu Pro Gly Glu Ser Phe Cys Asp Lys Val Met Arg Trp Phe Gln Ala
290 145                 150                 155                 160
293 Met Leu Gln Arg Leu Gln Thr Trp Trp His Gly Val Leu Ala Trp Val
294                 165                 170                 175
297 Lys Glu Lys Val Val Ala Leu Val His Ala Val Gln Ala Leu Trp Lys
298             180                 185                 190
301 Gln Phe Gln Ser Phe Cys Cys Ser Leu Ser Glu Leu Phe Met Ser Ser
302         195                 200                 205
305 Phe Gln Ser Tyr Gly Ala Pro Arg Gly Asp Lys Glu Glu Leu Thr Pro
306     210                 215                 220
309 Gln Lys Cys Ser Glu Pro Gln Ser Ser Lys
310 225                 230
313 <210> SEQ ID NO: 10
314 <211> LENGTH: 178
315 <212> TYPE: PRT
316 <213> ORGANISM: Homo sapiens
318 <400> SEQUENCE: 10
320 Met Lys Lys Leu Lys Ala Arg Met His Gln Ala Ile Glu Arg Phe Tyr
321 1               5                  10                  15
324 Asp Lys Met Gln Asn Ala Glu Ser Gly Arg Gly Gln Val Met Ser Ser
325             20                  25                  30
328 Leu Ala Glu Leu Glu Asp Asp Phe Lys Glu Gly Tyr Leu Glu Thr Val
329         35                  40                  45
332 Ala Ala Tyr Tyr Glu Glu Gln His Pro Glu Leu Thr Pro Leu Leu Glu
333     50                  55                  60
336 Lys Glu Arg Asp Gly Leu Arg Cys Arg Gly Asn Arg Ser Pro Val Pro
337 65                  70                  75                  80
340 Asp Val Glu Asp Pro Ala Thr Glu Glu Pro Gly Glu Ser Phe Cys Asp
341                 85                  90                  95
344 Lys Val Met Arg Trp Phe Gln Ala Met Leu Gln Arg Leu Gln Thr Trp
```

RAW SEQUENCE LISTING DATE: 05/22/2006
PATENT APPLICATION: US/10/578,943 TIME: 14:17:29

Input Set : A:\41976.txt
Output Set: N:\CRF4\05222006\J578943.raw

```
345                 100                 105                 110
348 Trp His Gly Val Leu Ala Trp Val Lys Glu Lys Val Val Ala Leu Val
349         115                 120                 125
352 His Ala Val Gln Ala Leu Trp Lys Gln Phe Gln Ser Phe Cys Cys Ser
353     130                 135                 140
356 Leu Ser Glu Leu Phe Met Ser Ser Phe Gln Ser Tyr Gly Ala Pro Arg
357 145                 150                 155                 160
360 Gly Asp Lys Glu Glu Leu Thr Pro Gln Lys Cys Ser Glu Pro Gln Ser
361                 165                 170                 175
364 Ser Lys
368 <210> SEQ ID NO: 11
369 <211> LENGTH: 5000
370 <212> TYPE: DNA
371 <213> ORGANISM: Homo sapiens
373 <400> SEQUENCE: 11
374 gcctagggtg gaccctattt caatatgact ggtgtccttt ggaaagggga aaggggacca     60
376 gtcacaccca ggcagaacgt gatgaagatg aagatggcca tctacaaggg caggagaaac    120
378 ctgaacagaa tcccagctcc gggccctcag aaggacccca cgctgcccac attgaccttg    180
380 gacctccagc ctgcagatcg tgagggaaga gacgtcttcg acttagggcc ccttgtcgtg    240
382 gtacttcctt agtttggccc caggaaacca tcccaaaggc aagggcgtgg ttgtgctcag    300
384 ctgggggaag ggggctgggg gccgtgagga ggaggtggga ggcccagcca ggctggaggg    360
386 tcagaacccg tggagctaga agagcccgta ggggagcccc aagattgctg agaccagtga    420
388 ccttcggccc cagatggcct tgccttggcc cagaagggtc agaaggacct ggtcagccaa    480
390 gctcagacag ccggcaggat gccttccacc ctgcagaggg tcctatcttg tcccacaggt    540
392 agatctacat caccactagc caccctcca acgtgcacag gcccctgccc tcacggcgcc    600
394 cctcttaggt ccggcagttc ctgcctcctt ctgatccaga agtttctctg gcctctggag    660
396 ccggggcaca cctcatgcaa ggacagggtc caaattcctt tgtccttgga tcccacttgg    720
398 ctgacgtcac cttcctgtac tcagggagtt tccccagcca gctgtcccga gtctggactt    780
400 tccctctgcc cctccccact ctcaggctgg tggggtgggg aaagcagccc attcctgggc    840
402 tcagagactc ccaccccagc tcagagggag caggggccca gccagggacg gaccctcatt    900
404 cctcccaggg accccagacc tctgtctctc tcgggtaagt ctccatctct gtctgtctct    960
406 gtctctgtct ctgtctctgt ctgttttca cgcactcagc aaggcctcct gccctgagag   1020
408 aggctccgcc cactaccccc cactttcccc ataaaaccag ctgagtattt gtgccaggaa   1080
410 gactgcgtgc agaaggtgac tgtctcagtg gagctgggtc atctcaggtg gggagttggg   1140
412 gtccccgaag gtgaggaccc tctggggagg agggtgcttc tctgagacac tttcttttcc   1200
414 tcacacctgt tcctcgccag caggccttgg ctccttgaac ttttggccgc catgtgcttc   1260
416 ccgaaggtga gtgagaggct gcgtgtgctt ttgtgggcat gtctgaaaac agaccgtaag   1320
418 ggtgcgggtg ccctcagtat ttcccgaggt gcctgtgtgt cagggctcag tcaggggcac   1380
420 ccagcggcag gaggatagtg atggggtgag agtgtcagtg gaggcgctgg aggtcatatg   1440
422 tgtcgggggc gctggagaac ggcaggggtg tggatgagag ggagcacctg tcccaggagc   1500
424 ccttcacagc ccggaaagcc cggggcaggg gtggggcagg gctctgctgg aaacgactcg   1560
426 gagaatgctt ctctcagagg ccggctcagc tgggtgggcc caagagcaag gcctgtgtgg   1620
428 gtcctggtgt ctcttcctcc tttcctgggt tccctccgac ctcccatcct ctaccactgc   1680
430 cccaccgcaa atgctaggcc caccacaccc tccagggagc tcttcggcct gtgacaatag   1740
432 gggtttccat gatgtggcct ggctcaggtt caggacagtg acccggagga cacatggctc   1800
434 ccgcatgtcg gcacggtgct gctttcaccc tggttcctgg gaaatcaggc tagcgggatg   1860
436 ggaccatcgc tgcctgaaag tgtgcagaca gctgccctgc ccagaatatg tccccaggcc   1920
438 ctgcgcactc tgtgggtgac tgtcaccact ctatagtggg ggaaaccagg catgtcaccc   1980
440 ccgagactag gcccttgacg tgggggctca gcggggattc tgtggggtgc ctctggcctc   2040
```

VERIFICATION SUMMARY DATE: 05/22/2006
PATENT APPLICATION: **US/10/578,943** TIME: 14:17:30

Input Set : **A:\41976.txt**
Output Set: **N:\CRF4\05222006\J578943.raw**

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date